

## ABSTRACT OF THE DISCLOSURE

A substrate polishing apparatus polishes a surface of a substrate such as a semiconductor wafer to a flat mirror finish. The substrate polishing apparatus according to the present invention has a rotatable table having a polishing pad for polishing a semiconductor substrate, a light emission and reception device for emitting measurement light through a through hole formed in the polishing pad to the semiconductor substrate and receiving reflected light from the semiconductor substrate so as to measure a film on the semiconductor substrate, and a supply passage for supplying a fluid to a path of the measurement light. The supply passage has an outlet portion positioned in the through hole.